

# iXH DRY PUMPS FOR HARSH PROCESSES

Giving you a clear edge



## PRODUCT DATASHEET

The iXH dry pump range is an evolution of our market leading iH products and sets new standards for harsh process capability, reliability and lower cost of ownership.

With a modular design, iXH pumps meet today's process requirements and have road-mapped responses to emerging application challenges in high-k, low-k, SACVD, LPCVD, ALD, TCO, GaN and EPI.

## Applications

Application	Compatibility
Load Lock	iXH can be used
Transfer	iXH can be used
Metrology	iXH can be used
Lithography	iXH can be used
PVD Process	iXH can be used
PVD Pre-Clean	iXH can be used
RTA	iXH can be used
Strip/Ashing	iXH can be used
Oxide Etch	iXH can be used
Silicon Etch	iXH can be used
Metal Etch	iXH can be used
Implant Source	iXH can be used
HDP-CVD	iXH recommended
RTP	iXH recommended
SACVD	iXH recommended
MOCVD	iXH recommended
PECVD	iXH recommended
LPCVD	iXH recommended
ALD	iXH recommended

Application	Compatibility
iGX can be used	iGX recommended
iXL recommended	

Clean Applications	Harsh Applications
Non-reactive gases used	Corrosive or reactive gases used



## Features and benefits

More process capability

- Greatly increased powder handling capability and innovative Gas Buster™<sup>(1)</sup> technology
- Wide temperature range allows optimisation of pump to minimise by-product accumulation from condensation and plating
- Innovative pump seal technology to lengthen process life and reduce leakage risks<sup>(1)</sup>

Reduced cost of ownership

- 10% less energy consumption than the previous model
- SEMI® E54 compatible and Green Mode capable
- Longer overhaul intervals and less unscheduled down time

Greatly increased hydrogen pumping speed for advanced EPI and solar processes

High capacity dry pumps and boosters give an expanded process window to enhance yields

Complies with key international standards including UL, CE and S2

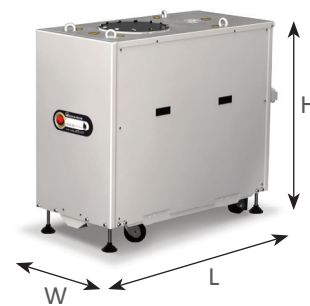
Smaller footprint and lower height for ease of fitting in any fab

<sup>1</sup> Patent applied for

# Technical data

Product		iXH 100	iXH 200H	iXH 610	iXH 1210	iXH 1210H	iXH 1210HT	iXH 1220H
Dry pump size	m <sup>3</sup> /h	100	200	100	100	100	100	200
Booster size	m <sup>3</sup> /h			600	1200	1200	1200	1200
Peak Speed	m <sup>3</sup> /h	100	215	665	1025	1065	1000	1250
Ultimate Vac (Typical)	Torr	1.5x10 <sup>-2</sup>	7.5x10 <sup>-3</sup>	3.7x10 <sup>-3</sup>	3.7x10 <sup>-3</sup>	3.7x10 <sup>-3</sup>	7.5x10 <sup>-3</sup>	3.7x10 <sup>-3</sup>
System Power at Ult. <sup>(2)</sup>	kW	2.1	3.7	2.6	3.2	3.9	3.9	4.8
Inlet Connection	ISO	63	63	100	100	100	100	100
Outlet Connection	NW	40	40	40	40	40	40	40
Typical Water Flow <sup>(1)</sup>	l/m	2.0	2.7	3.0	4.0	4.2	4.2	4.7
Purge Flow Range	slm	28/44*	28/44*	22/44*	22/44*	22/44*/60	22/44*/60	34*/96/122
Weight	kg	260	287	355	430	413	413	457

# Dimensions



Product		iXH 1220HTX	iXH 1820T	iXH 1820	iXH 1820H	iXH 3030TX	iXH 3030 <sup>(2)</sup>	iXH 3030T
Dry pump size	m <sup>3</sup> /h	200	200	200	200	300	300	300
Booster size	m <sup>3</sup> /h	1200	1800	1800	1800	3000	3000	3000
Peak Speed	m <sup>3</sup> /h	1250	1700	1820	1825	2750	2900	2750
Ultimate Vac. (Typical)	Torr	3.7x10 <sup>-3</sup>	3.7x10 <sup>-3</sup>	3.7x10 <sup>-3</sup>	3.7x10 <sup>-3</sup>	3.7x10 <sup>-3</sup>	3.7x10 <sup>-3</sup>	3.7x10 <sup>-3</sup>
System Power at Ult. <sup>(2)</sup>	kW	4.8	4.0	3.9	4.8	5.7 <sup>(4)</sup>	5.7	5.7
Inlet Connection	ISO	100	160	160	160	160	160	160
Outlet Connection	NW	40	40	40	40	40	40	40
Typical Water Flow <sup>(1)</sup>	l/m	4.7	3.5	4.2	4.7	4.5	5.0	4.5
Purge Flow Range	slm	34*/96/122	34/96*/122	28/44*	34*/96/122	34*/96/122	28/44*	34/96*/122
Weight	kg		473	471	487	625	619	624

Dimensions (mm)	L	W	H
iXH100	784	390	526
iXH200H	901	390	526
iXH610, 1210, 1210H, 1210HT	784	390	780
iXH1220H, 1820, 1820T, 1820H, 1220HTX	901	390	780
iXH3030, 3030T, 3030TX	915	517	966

\* Factory default setting

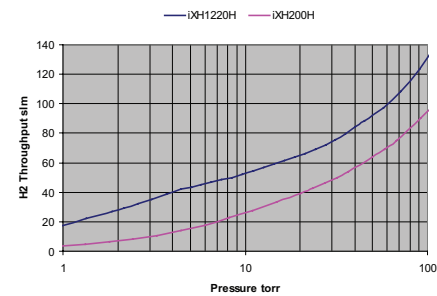
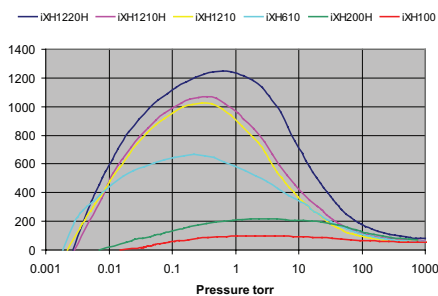
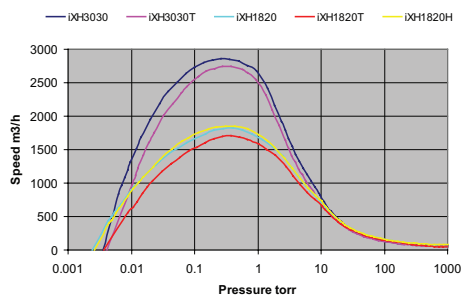
(1) Water consumption varies with pump operating temperature; figures at 110 °C

(2) Average power at 700 T exhaust pressure

(3) Booster heaters add 1 kW when switched on

(4) Booster heaters add 1.5 kW when switched on

# Performance curves



Chemtech Scientific provides access to this content as a courtesy.  
 We do not own the content contained in this document.  
 All rights and credit go directly to its rightful owners.  
[www.chemtechsci.com](http://www.chemtechsci.com)  
 Call us at: 484-424-9415

